#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024867

Address: 333 Burma Road **Date Inspected:** 27-Feb-2011

City: Oakland, CA 94607

**Project Name:** SAS Superstructure **OSM Arrival Time:** 1500 **OSM Departure Time:** 300 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China

**CWI Name:** Sha Zhi **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes N/A **Delayed / Cancelled:** No

34-0006 **Bridge No: Component:** OBG

#### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

**NDT** 

OBG Bay 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 08413.

Ultrasonic Testing (UT)

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG. The weld designations reviewed is as follows:

SEG3020D-052 SEG3020E-044, 053, 056

WELDING

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

OBG Bay 14

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3019Z-011 located on Longitudinal Diaphragm to Bottom Plate of the OBG Segment 14E. The welder is identified as 044779. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair & B-WR19727.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SEG3019E-011 located on Longitudinal Diaphragm to Floor Beam of the OBG Segment 14E. The welder is identified as 054013. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-FCM-Repair & B-CWR2650.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as DP3161-001-035 located on Deck Panel Diaphragm to Floor Beam of the OBG Segment 14E. The welder is identified as 215553. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-FCM-Repair & B-WR20276.

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as FB3287-001-018 located on Floor Beam Stiffener of the OBG Segment 14E. The welder is identified as 067610. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-P-2114-FCM.

Flux Cored Arc Welding (FCAW)

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SA3066-003 located on SA of the OBG Segment 13CE. The welder is identified as 044795. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SA3214A-001-007 located on SA of the OBG Segment 13CE. The welder is identified as 044790. ZPMC Quality Control (QC) is identified as Mr. Li Ping. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This QA Inspector observed the welding operation per the FCAW process on a weld joint identified as SEG3019N-304 located on Bottom Plate of the OBG Segment 14E. The welder is identified as 051356. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

contract documents.

## **Summary of Conversations:**

No relevant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Singh,Vikram	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer